

signal, and the expressed polypeptide is bound to a solid phase with the aid of the detection signal,

- (b) independently of step (a), the DNA encoding the polypeptide is introduced directly into an animal, resulting in expression of a polypeptide in the animal, which expression causes the formation of antibodies against the polypeptide and the expression vector employed for the genetic immunization in step (b), for the purpose of preparing the desired antibodies, is also used *in vitro* for producing the target protein, and
- (c) the antibodies which are formed in step (b) are reacted with the polypeptide formed in step (a) and detected or enriched.

**2.** (Amended) The process according to claim 1, wherein the vector used in step (a) possesses, at the C-terminus of the DNA encoding the polypeptide, a sequence which encodes the detection signal.

*Sub 3* 3. (Amended) The process according to claim 2, wherein the detection sequence is selected from the group consisting of His<sub>6</sub>, tag sequence, the hemagglutinin sequence of an influenza virus and the myc tag sequence.

4. (Amended) The process according to claim 1, wherein the vector encoding the polypeptide possesses a polyadenylation sequence at the C-terminal end of the detection sequence.

5. (Amended) The process according to claim 1, wherein the vector encoding the polypeptide possesses a strong promoter at the 5' end of the DNA sequence encoding the polypeptide.

6. (Amended) The process according to claim 5, wherein the strong promoter is selected from the group consisting of strong eucaryotic promoters, in particular the elongation factor 1 $\alpha$  promoter or the cytomegalovirus promoter.

*Sub B4* 7. (Amended) The process according to claim 1, wherein the polypeptide-encoding DNA which is introduced directly into an animal in accordance with step (b) is present in a vector.

8. (Amended) The process according to claim 1, wherein the polypeptide-encoding DNA is introduced into the animal in step (b) using a gene gun.

9. (Amended) The process according to claim 1, wherein the animal employed in step (b) is a mouse, a rat or a rabbit.

*Sub B5* 10. (Amended) The process according to claim 1, wherein in step (b), a genetic adjuvant is administered in addition to the polypeptide-encoding DNA.

*a2*  
*cont*

**11.** (Amended) The process according to claim 10, wherein the genetic adjuvant is a cytokine expression vector which increases antibody production.

**12.** (Amended) The process according to claim 1, wherein suitable cells from an animal which has been immunized in accordance with step (b) are used for preparing hybridoma cells for forming monoclonal antibodies.

**13.** (Amended) The process according to claim 1, wherein the polypeptide formed in step (a) is bound to a solid phase by means of the detection signal being bound to an antibody or an antibody fragment which is directed against it.

**14.** (Amended) The process according to claim 13, wherein the solid phase is selected from the group consisting of microtiter plates, gel spheres and magnetic beads.

**15.** (Amended) The process according to claim 1, wherein the antibody formed in step (b) is detected, after having been bound to the polypeptide formed in step (a), using an anti-antibody which is detected against the antibody.

**16.** (Amended) The process according to claim 1, wherein the antibody which is reacted with the expressed polypeptide in step (c) is released by elution.

17. (Amended) The process according to claim 1, wherein the detection signal is a sequence which is responsible for membrane anchoring using a GPI residue.

*A2  
cont'd*  
18. (Amended) An antibody produced by a process comprising:

- (a) expressing DNA encoding a polypeptide in a host cell which is derived from a mammal using a vector which possesses at least one sequence encoding a detection signal, and the expressed polypeptide is bound to a solid phase with the aid of the detection signal,
- (b) independently of step (a), the DNA encoding the polypeptide is introduced directly into an animal, resulting in expression of a polypeptide in the animal, which expression causes the formation of antibodies against the polypeptide and the expression vector employed for the genetic immunization in step (b), for the purpose of preparing the desired antibodies, is also used *in vitro* for producing the target protein, and
- (c) the antibodies which are formed in step (b) are reacted with the polypeptide formed in step (a) and detected or enriched.